

## Contents of *Animal Feed Science and Technology*, Volume 83

VOL. 83 NO. 1

1 JANUARY 2000

Effects of different grinding methods and particle size of barley and wheat on pig performance and digestibility P. Laurinen (Helsinki, Finland), H. Siljander-Rasi (Hyvinkää, Finland), J. Karhunen (Vihti, Finland), T. Alaviuhkola (Hyvinkää, Finland), M. Näsi and K. Tuppi (Helsinki, Finland)	1
The energy value of <i>Lupinus angustifolius</i> and <i>Lupinus albus</i> for growing pigs R.H. King, F.R. Dunshea, L. Morrish, P.J. Eason (Werribee, Australia), R.J. van Barneveld (Adelaide, Australia), B.P. Mullan (Bentley Delivery Centre, Australia) and R.G. Campbell (Corowa, Australia)	17
Effective rumen degradability and intestinal indigestibility of individual amino acids in solvent-extracted soybean meal (SBM) and xylose-treated SBM (SoyPass <sup>®</sup> ) determined in situ O.M. Harstad and E. Prestløkken (Ås, Norway)	31
<i>Saccharomyces cerevisiae</i> and nitrogenous supplementation in growing steers grazing tropical pastures E.J.I. Cabrera, M.G.D. Mendoza, I.E. Aranda, C. Garcia-Bojalil, G.R. Bárcena and J.J.A. Ramos (Estado de Mexico, Mexico)	49
Nutritional properties of the leaf and stem of rice straw J. Vadiveloo (Shah Alam, Malaysia)	57
Effect of feeding tamarind ( <i>Tamarindus indica</i> ) seed husk as a source of tannin on dry matter intake, digestibility of nutrients and production performance of crossbred dairy cows in mid-lactation R. Bhatta, U. Krishnamoorthy and F. Mohammed (Bangalore, India)	67
<b>Short communication</b>	
Chemical composition, DM and NDF degradation kinetics in rumen of seven legume straws A.M. Bruno-Soares, J.M.F. Abreu (Lisbon, Portugal), C.V.M. Guedes and A.A. Dias-da-Silva (Vila Real, Portugal)	75
<b>Guide for Authors</b>	81

VOL. 83 NO. 2

18 FEBRUARY 2000

<b>Publisher's note</b>	87
Effects of increasing amounts of <i>Lupinus albus</i> seeds without or with whole egg powder in the diet of growing pigs on performances C. Van Nevel (Sint-Genesius-Rode, Belgium and Melle, Belgium), M. Seynaeve (Merelbeke, Belgium), G. Van De Voorde, S. De Smet (Melle, Belgium), E. Van Driessche (Sint-Genesius-Rode, Belgium) and R. De Wilde (Merelbeke, Belgium)	89

Effect of microbial phytase produced from a fungus <i>Aspergillus niger</i> on bioavailability of phosphorus and calcium in broiler chickens T. Ahmad, S. Rasool, M. Sarwar, Ahsan-ul Haq and Zia-ul Hasan (Faisalabad, Pakistan) . . .	103
Changes in the alkaline-labile phenolic compounds of wheat straw cell walls as affected by SO <sub>2</sub> treatment and passage through the gastro-intestine of sheep E. Yosef and D. Ben-Ghedalia (Bet Dagan, Israel) . . . . .	115
In vitro study of the rumen and hindgut fermentation of fibrous materials (meadow hay, beech sawdust, wheat straw) in sheep Z. Váradyová, I. Zelenýák and P. Siroka (Kosice, Slovak Republic) . . . . .	127
Content of soluble and bound condensed tannins of three tropical herbaceous forage legumes J.F. Mupangwa (Harare, Zimbabwe), T. Acamovic, J.H. Topps (Scotland, UK), N.T. Ngongoni and H. Hamudikuwanda (Harare, Zimbabwe) . . . . .	139
In vitro microbial fermentation of tropical grasses at an advanced maturity stage J.C.M. Nogueira Filho (Pirassununga, Brazil), M. Fondevila (Zaragoza, Spain), A. Barrios Urdaneta (Maracaibo, Venezuela) and M. González Ronquillo (Zaragoza, Spain) . . . . .	145
<b>Short communications</b>	
Quality characteristics of broiler blood meal as affected by yeast, glucose oxidase, and antioxidant treatments G.W. Lu and T.C. Chen (Mississippi State, MS, USA). . . . .	159
Effect of a yeast culture ( <i>Saccharomyces cerevisiae</i> ) and monensin on ruminal fermentation and digestion in sheep C.C.G. García, M.G.D. Mendoza, M.S. González, P.M. Cobos, C.M.E. Ortega and L.R. Ramirez (México, Mexico) . . . . .	165

## VOL. 83 NOS. 3-4

6 MARCH 2000

Evaluation of the chemical composition and the particle size of maize silages produced in north-west of Portugal A.J.M. Fonseca, A.R.J. Cabrita, A.M. Lage and E. Gomes (Vila do Conde, Portugal) . . . . .	173
Blend of oil palm slurry and rice bran as feed ingredient for broiler chickens C.C. Atuahene, A. Donkoh and I. Ntim (Kumasi, Ghana). . . . .	185
Feed intake, digestibility, plane of nutrition and live weight gain by crossbred growing bulls fed on grainless diets containing different nitrogen sources S.S. Giri, A. Sahoo and N.N. Pathak (Izatnagar, India). . . . .	195
An automated system for measuring gas production from forages inoculated with rumen fluid and its use in determining the effect of enzymes on grass silage Z.S. Davies, D. Mason, A.E. Brooks, G.W. Griffith, R.J. Merry and M.K. Theodorou (Wales, UK) . . . . .	205
Effect of replacing soybean protein with cassava leaf protein in cassava root meal based diets for growing pigs on digestibility and N retention B.H. Nhu Phuc (Ho Chi Minh City, Viet Nam), B. Ogle and J.E. Lindberg (Uppsala, Sweden). . .	223
Effects of <i>Spirulina platensis</i> on growth performance of weanling pigs G.S. Grinstead, M.D. Tokach, S.S. Dritz, R.D. Goodband and J.L. Nelssen (Manhattan, KS, USA) . . . . .	237
Feeding tallow triglycerides of different saturation and particle size to lactating dairy cows M.L. Eastridge and J.L. Firkins (Columbus, OH, USA) . . . . .	249
Colonization and source of N substrates used by microorganisms digesting forages incubated in synthetic fibre bags in the rumen R.M. Dixon and S. Chanchai (Parkville, Australia) . . . . .	261

The effect of animal species on in sacco degradation of dry matter and protein of feeds in the rumen K.S. Nandra (Camden, Australia), R.C. Dobos (Armidale, Australia), B.A. Orchard (Wagga Wagga, Australia), S.A. Neutze (Pendle Hill, Australia), V.H. Oddy (Armidale, Australia), B.R. Cullis (Wagga Wagga, Australia) and A.W. Jones (Camden, Australia) . . . . .	273
Energy metabolism with particular reference to methane production in Muzaffarnagari sheep fed rations varying in roughage to concentrate ratio Chandramoni, S.B. Jadhao, C.M. Tiwari and M.Y. Khan (Izatnagar, India) . . . . .	287
Chemical characterization and in situ nutrient degradability of wet distillers' grains derived from barley-based ethanol production A.F. Mustafa, J.J. McKinnon and D.A. Christensen (Saskatoon, Canada). . . . .	301
Rumen degradation in sacco in sheep of wheat straw treated with calcium oxide, sodium hydroxide and sodium hydroxide plus hydrogen peroxide A.S. Chaudhry (Newcastle-upon-Tyne, UK) . . . . .	313
<b>Corrigendum</b> . . . . .	325
<b>Publisher's Acknowledgement</b> . . . . .	327
<b>Contents of <i>Animal Feed Science and Technology</i>, Volume 83</b> . . . . .	329